The Pedestrian Bridge across the River Rinža, Kočevje, Slovenia. 2024

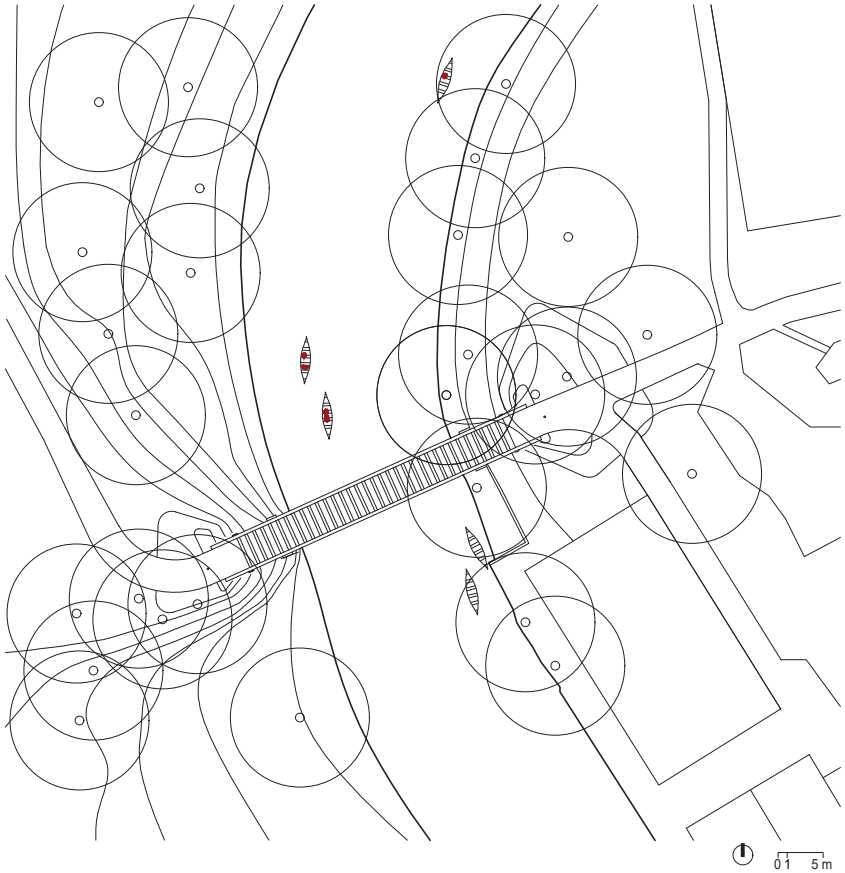
The footbridge across the Rinža River is experienced as a highlight and focal point of the Gaj Sports Park area, just before the river enters the centre of Kočevje. The bridge's position is defined by three elements: the river it crosses, the two banks it connects, and the path that runs across it. Within this space, the bridge establishes a new relationship, uniting both sides. It sounds simple, but it holds many layers of meaning. People have always attributed special importance to bridges.

The existing footbridge was worn out, and its slopes, width, and railing height were no longer suitable for safe use by cyclists and pedestrians. Therefore, the new bridge was designed with a gentler slope, which is why it is longer than the previous one. We wanted to reuse the existing foundations, so we reshaped them and incorporated them as the intermediate supports for the new 37.8-metre-long bridge.

The footbridge spans in a long, elegant curve, passing over two recycled supports and gently resting on the riverbanks. The shape of the bridge was designed to meet the requirements of water flow regulations during flood events (the height of the 100-year flood) and to provide a slope suitable for cycling paths.

The bridge is located in a protected Natura 2000 area and on the natural site of the Rinža River. Therefore, we were not permitted to interfere with the riverbanks, and it was necessary to minimise the impact on the surrounding environment during construction. As a result, we preserved and emphasised the existing landscape and environmental qualities.

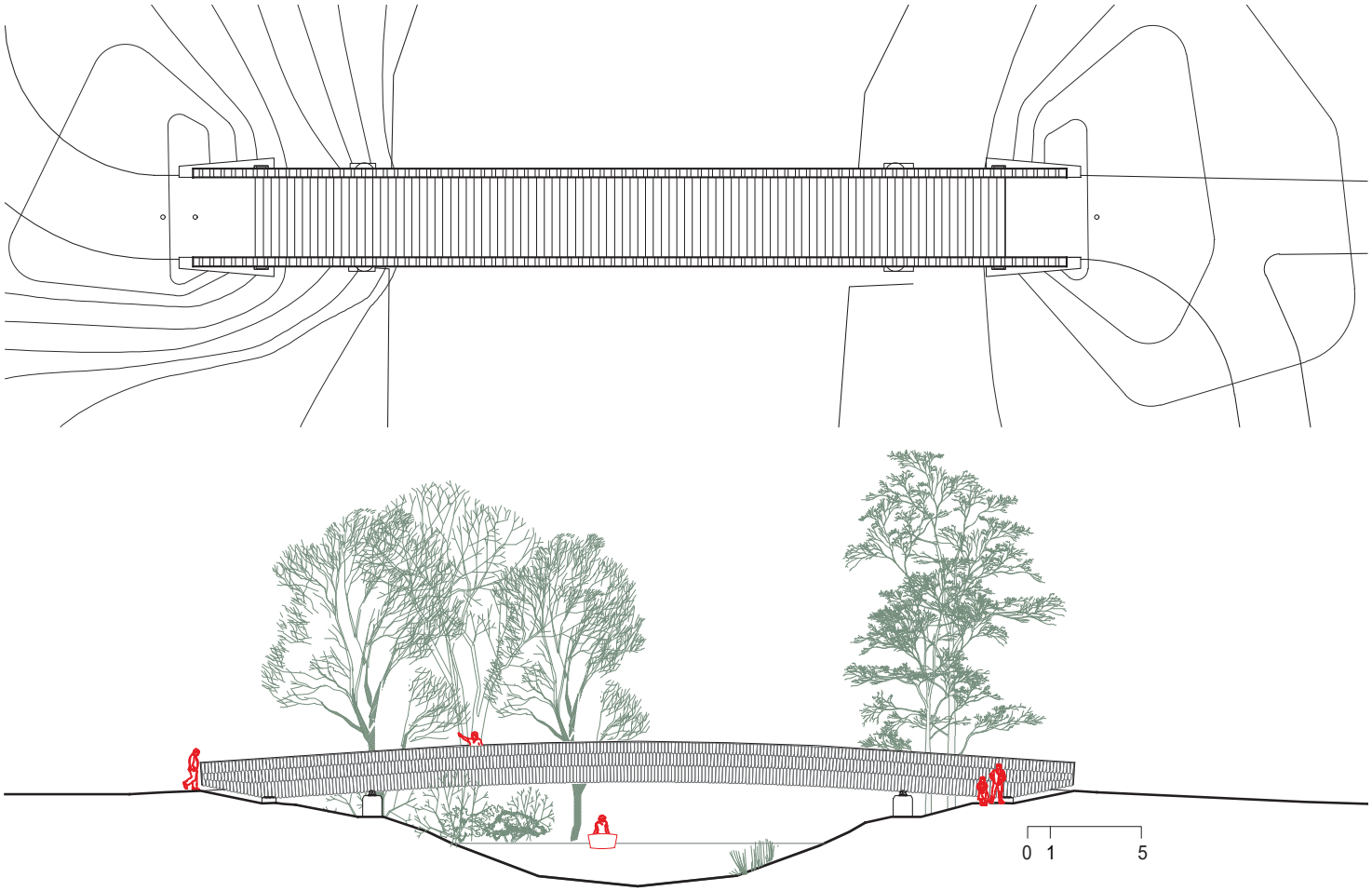
The footbridge is made of wood. It has a main span of 23.3 metres between the intermediate supports and a total length of 37.8 metres. The clear width of the bridge is 3.5 metres.



The main structure of the bridge consists of two arched, glued-laminated timber beams, each 1.6 metres high. Transversely, the main beams are connected by spruce glulam crossbeams, spaced at approximately 2.60 metres. These cross-beams are attached to the main beams using steel "shoes," which are connected to the beams with steel anchor plates. Along the length of the bridge, secondary beams made of spruce glulam, spaced at 1-metre intervals, are mounted onto the crossbeams. On top of these, an oak timber deck is laid, serving as the walking and cycling surface.

These structural beams also serve as railings, with a height of 1.25 metres. To extend the bridge's lifespan, the beams are protected with textured wooden cladding. This cladding can be replaced multiple times if needed, while the load-bearing structure is shielded from weather exposure. On the inner side, the lower part of the cladding is laid horizontally, allowing for the easy replacement of only the bottom row of boards—typically damaged by snow and rain—during maintenance, while the higher, vertically installed boards remain intact. The height of the railing ensures safety, while its solid material presence and proportions also convey a sense of stability in a symbolic way. The bridge gains a poetic dimension, similar to that of traditional wooden vernacular structures such as barns and hayracks.

The construction of the footbridge was highly cost-effective. This design approach and material use could serve as a model for building bridges over small watercourses. The footbridge is designed with sustainability principles fully integrated into its concept. Its architecture follows the principles of sustainable construction, aiming to alter the site as little as possible. This approach minimises environmental impact while also reducing the amount of work and materials required. The choice of materials and construction responds to the spatial and cultural context of the location. Its simplicity lies in the use of locally sourced materials and their traditional application.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